Listing of Claims:

- 1-16 (Cancelled)
- 17. (currently amended) A method of sensitizing tumor cells to chemotherapy, comprising the step of exposing the tumor cell to an effective amount of at least one monoterpene or sesquiterpene and treating the tumor cell with an effective amount of chemotherapeutic agent, wherein the chemotherapeutic agent is selected from the group consisting of alkylating agents, antimetabolites, derivatives of natural products, and chemically synthesized drugs.
- 18. (original) The method of claim 17 in which the tumor cell is exposed to a monoterpene.
- 19. (original) The method of claim 18 wherein the monoterpene is perillyl alcohol.
- 20. (original) The method of claim 18 wherein the monoterpene is selected from the group consisting of perillyl alcohol, limonene, carvone, menthol, citral, myrecene and geranyl tigllate.
- 21. (original) The method of claim 18 wherein the monoterpene is selected from the group consisting of perillyl alcohol, liminone, carvone, citral, myrecene, and geranyl tigllate.

Appl. No. 10/014,724 Amdt. Dated September 28, 2005 Reply to Office Action of April 8, 2005

- 22. (original) The method of claim 17 wherein the tumor cell is a malignant glioma cell.
- 23. (original) The method of claim 17 wherein the tumor cell is selected from the group consisting of colon, pancreatic and prostate cells.
- 24. (original) The method of claim 17 wherein the cell is exposed to the monoterpene or sesquiterpene before and during chemotherapy.
- 25. (original) The method of claim 17 wherein the cell is exposed to a monoterpene.
- 26. (currently amended) A method of sensitizing tumor cells to cytokines, comprising the step of exposing the tumor cell to an effective amount of at least one monoterpene or sesquiterpene and treating the tumor cells with the immunomodulatory agent cytokine.
- 27. (original) The method of claim 26 wherein the monoterpene is perillyl alcohol.
- 28. (original) The method of claim 26 wherein the monoterpene is selected from the group consisting of perillyl alcohol, limonene, carvone, menthol, citral, myrecene and geranyl tigllate.

Appl. No. 10/014,724 Amdt. Dated September 28, 2005 Reply to Office Action of April 8, 2005

- 29. (original) The method of claim 26 wherein the monoterpene is selected from the group consisting of perillyl alcohol, liminone, carvone, citral, myrecene, and geranyl tigllate.
- 30. (original) The method of claim 26 wherein the tumor cell is a malignant glioma cell.
- 31. (original) The method of claim 26 wherein the cell is exposed to the monoterpene or sesquiterpene before or during therapy.
- 32. (original) The method of claim 31 wherein the cell is exposed to a monoterpene.
 - 33. (canceled)
- 34. (new claim) The method of claim 17 wherein the agent is selected from the group consisting of Nitrogen Mustard, Cholorambucil, Melphalan, Cyclophosphamide, Nitrosourceas, BCNU, CCNU, Procarbazine, Trenimon, Busulphan, Cisplatin and Mitomycin C.
- 35. (new claim) The method of claim 17 wherein the agent is selected from the group consisting of Methotrexate, fluorouracil, 6 mercaptourines, topothecan, and campothecin and its derivatives.

Appl. No. 10/014,724 Amdt. Dated September 28, 2005 Reply to Office Action of April 8, 2005

- 36. (new claim) The method of claim 17 wherein the agent is selected from the group consisting of Doxorubicin (Adriamycin), Bleomycin, Actinomycin, and vinca alkaloids.
- 37. (new claim) The method of claim 17 wherein the agent is selected from the group consisting of Cisplatin and Doxorubicin.